

# VFS



## The next BIG thing?

Marcus Goossel

At the 2006 US Nationals a test event was held in 4-way Vertical Formation Skydiving. With nine teams and 45 competitors it proved more popular than the traditional artistic freefly discipline. This year 4-way VFS (also known as VRW) was an official event at the US Nationals, VRW was introduced to the UK in the form of a demo event at the FS Nationals and the first European competition was held in Chalon sur Saône, France. In January the rules from the 2006 US Nationals were introduced to the IPC in the hope of it soon becoming a World Cup event. Does this signal the birth of the next big discipline in skydiving?

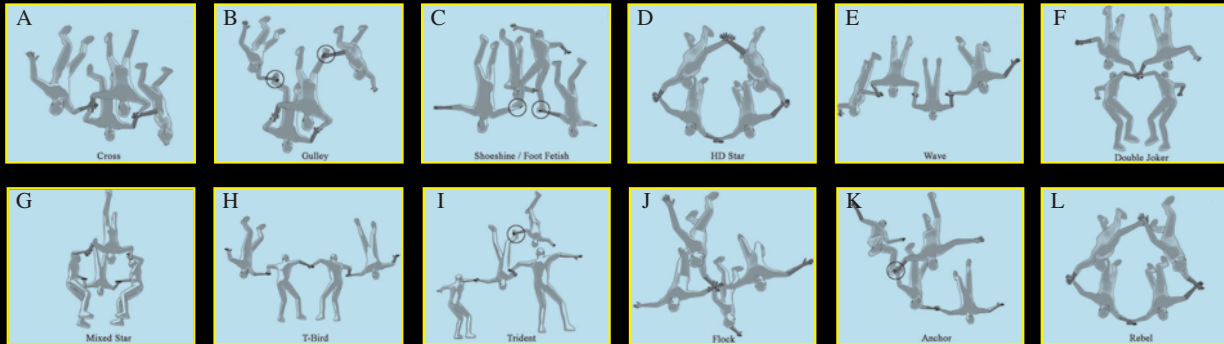
### Why VFS?

Over the last ten to fifteen years, skydiving has seen the development of human flight in all possible orientations and positions. In the same way that skydivers moved away from the classic solo discipline of freefall style to go have fun with their friends and build a freefall formation, many have been attracted to freeflying from FS, wanting more freedom and more emphasis on fun. Of course, when skydivers first started jumping together

in a belly-to-earth orientation they struggled to pass a baton and, in just the same way, when skydivers first started to 'freefly' together they struggled to perform a spock (a head-down flyer placing a hand on the head of a head-up flyer).

However, over the years flat flying has been refined into a discipline where the World Record for the number of 4-way formations in 35 seconds is now 44 and the largest formation is a 400-way. So it comes as no surprise that freeflying has also moved on from the humble 'spock' to a point where the top 4-way VFS teams are doing 19 points in 35 seconds and the current world record largest head-down formation is 69!

Previously the only way for skydivers to compete in what are traditionally seen as 'freefly' orientations has been in freestyle or freeflying. Both of these are artistic disciplines that can be difficult to judge and often leave skydivers scratching their heads as to what is required or even unhappy with the results. A group of skydivers in the US led by team *Mandrin* wanted to create a discipline using these traditionally 'freefly' body positions that could be judged completely objectively and remove the element of uncertainty implicit in artistic skydiving. The result is 4-way Vertical Formation Skydiving, also known as Vertical Relative Work.





### What is VFS?

4-way vertical formation skydiving is in many ways very similar to traditional 4-way formation skydiving. The 2006 dive pool consisted of six blocks and eight randoms and in 2007 that was increased to twelve blocks and twelve randoms. In the advanced category formations are drawn from the hat until four or five points (whichever is first) are drawn per round. There is also an intermediate category using a reduced dive pool from which three or four scoring formations are drawn per round. Competitions are currently competed over six rounds with a minimum exit altitude of 12,500 ft and a working time of 35 seconds.



Photos: Andy Lovemore

<p>1</p> <p>Arrowhead</p>	<p>2</p> <p>Claw</p>	<p>3</p> <p>HD Accordion</p>	<p>4</p> <p>Chain Gang</p>	<p>5</p> <p>Mixed Accordion</p>	<p>6</p> <p>Snowflake</p>
<p>Inter</p>	<p>Inter</p>	<p>Inter</p>	<p>Inter</p>	<p>Inter</p>	<p>Inter</p>
<p>Arrowhead</p>	<p>Claw</p>	<p>HD Accordion</p>	<p>Chain Gang</p>	<p>Mixed Accordion</p>	<p>End of Snowflake</p>



One big difference between VFS and traditional FS is that two orientations are used; both head-down and head-up. Just as with traditional FS, complete separation must be shown between points; however an interesting result of using two orientations is that a formation that involves both head-down and head-up flyers can be built in one orientation and then flyers can transition into the correct orientation whilst maintaining grips, a useful cheat at times.

Another clear difference is that not all of the formations are built with all flyers on one level; often the formations can have height as well as length or width. An example of this is where a head-down flyer takes a grip on the foot of another head-down flyer. This gives VFS a very three-dimensional feel.

**Gear**

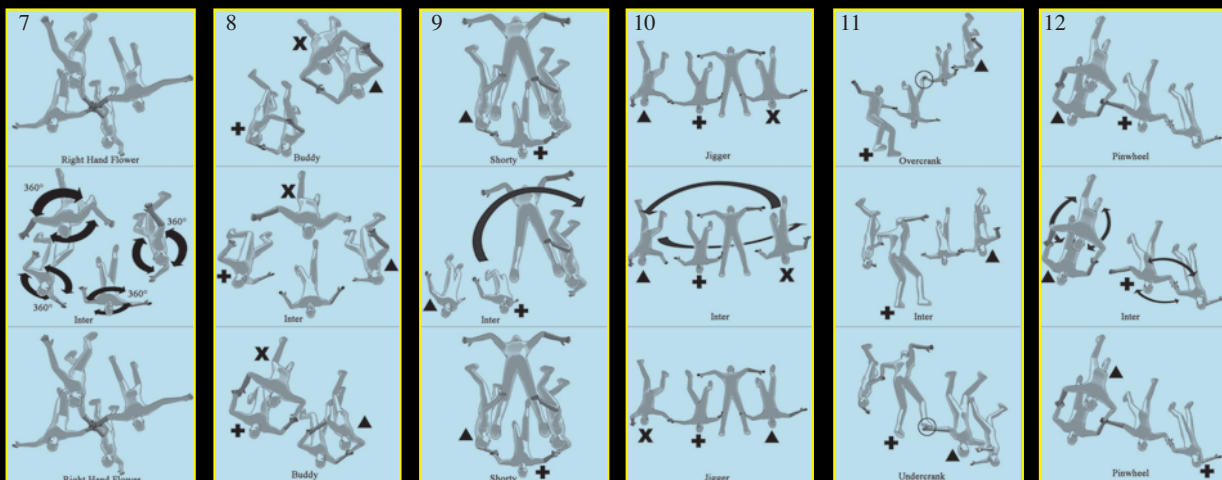
Not surprisingly it seems that the top teams have taken to wearing full-face helmets for added protection. With four people working fast in such close proximity and also performing transitions between head-up and head-down there is obviously an increased risk of getting a boot (not a bootie) in the head.

The suits seem to be much the same as the top flyers in the artistic disciplines are using. Well fitted with not much excess material flapping around that could make grip-taking tricky and reduce the efficiency of movement between formations. Many teams are using gloves of a contrasting colour to their suits to make grips ultra visible. Mirroring flat 4-way even further, the 2007 US national champions, *Mandrin*, also use arm and leg grippers.



**Camera**

Due to the three-dimensional nature of 4-way VFS the cameraperson's job is very challenging. The skydivers are filmed from underneath with the cameraflyer in a head-down orientation, chin on chest, and the camera mounted to further increase the angle. Just as with traditional FS all grips must be shown and in order to achieve this the cameraflyer must be in the correct position relative to each different formation.



# The First European VFS Championships

Photos: Wendy Smith



Gold for UK VRW (Andy Lovemore, Dan Parker, Mikey Carpenter, Andy Ford & Jim Harris)

There have been competitions running in the US since 2005, and VFS has already become an official discipline at the US Nationals. The Americans have definitely had a head start; however Europe is not about to let them get too far ahead! The first European VFS competition, The Trophée International Dubuisson, was held in Chalon sur Saône, France, 28-30 September 2007 and can probably claim to be the first international event in this discipline. Five teams entered; three French, one Belgian and one British. The competition aircraft was a Pilatus Porter.

The British team, imaginatively named *UK VRW*, was Dan Parker, Andy Ford, Mike Carpenter, Jim Harris with Andy Lovemore on video. Although the team had completed around 70 training jumps at Skydive Spain (Seville) and Hibaldstow, the boys hadn't jumped together for a month and arrived one day early to get some last minute training done. Unfortunately the sun didn't appear for two days and, although this provided a great opportunity for participants to brush up on go-karting skills, it also meant that the Brit team had to go straight into the competition having never jumped at the DZ or trained from the small right hand door of a Porter. This was especially challenging as the aircraft only had a small rear camera step and the best place for a VFS cameraflyer to exit from was the strut!

*UK VRW* will be training hard in 2008 and are currently looking for sponsors. If you're interested in supporting the UK's first VFS team contact [jim@outbreak-freefly.com](mailto:jim@outbreak-freefly.com)



After the rain during the week Saturday morning appeared under a deep blanket of mist but it was clear it would burn off into a beautiful day and, as soon as visibility was good enough, the competition got going.

This being the first meet of its type in Europe none of the teams had a clue as to where they would sit in the order after the first round. The French were expected to be strong, especially on their home turf and with many well-known faces amongst their ranks. When the scores appeared it became clear that the competition was going to be closer than expected, *UK VRW* were placed third just one point behind both *170MAX* (max height of a team member being 170cm) and *All Gap Icarus*. The French weren't going to race away after all!

Over the following three rounds *UK VRW* pulled back that point and moved ahead of *170MAX* into a two point lead. In doing this the Brit team were scoring 7 or 8 points in time, the highest they had yet achieved and really rising to the competition. Round 5 saw a momentary lapse and there was some concern that the French would pull back the points; however it turned out that the UK maintained their advantage into round 6, the final one of the competition. The UK were back on the ball and pulled out a storming round, extending their lead further to end the competition three points ahead of *170MAX* and eight points ahead of *Jok'Air 5* becoming the first unofficial VRW champions of Europe!

Jim Harris

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## Trophée International Robin Dubuisson

	Country	Rd 1	Rd 2	Rd 3	Rd 4	Rd 5	Rd 6	Total	Ave	
1	UK VRW	UK	4	7	7	8	4	6	36	6.0
2	170MAX	France	5	6	6	7	4	5	33	5.5
3	Jok'Air 5	France	4	5	4	4	4	7	28	4.7
4	All Gap Icarus	France	5	3	3	3	5	7	26	4.3
5	Vertical Ineptitude	Belgium	2	4	3	1	2	3	15	2.5

Photo: Andy Ford



**Links:**

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